

ABSTRACT

An electric energy storage device for reducing electric resistance between the anode/cathode electrodes and their terminals is disclosed. In the electric energy storage device, an anode electrode and a cathode electrode are stacked to have offset areas with predetermined margins and an insulating film is inserted therebetween. And, the stacked electrodes between which the insulating film is inserted is rolled up so as to form an electrode body. A plate type anode terminal and a plate type cathode terminal which have the thread-like unevenness at their bottoms are connected to a top and bottom of the rolled electrode body respectively. A metal layer is formed on both contact areas of the anode and cathode electrodes by plasma or arc spray. The device enables to reduce the electric resistance between the electrodes and terminals by minimizing a current path in the electrodes, reduce the internal electric resistance effectively by increasing the contact areas between the electrodes and terminals because of a plurality of the thread-like unevenness formed at the bottoms of the terminals, and decrease the contact resistance therebetween by contacting the anode and cathode terminals with a metal layer formed on the anode and cathode electrodes by metal spray.